

The consideration of greatest importance is that of diagnosis. Clinical manifestations are often misleading, and even though they seem, in most cases, to accurately correspond with pathologic changes, we usually hesitate to go on record further than to recommend either a period of observation or immediate surgical interference.

Granted, that we have a case of cholecystitis, the question immediately arises: "Is it an acute condition or an acute exacerbation of a long-standing inflammatory process?" Patients, half in fear, are often very reticent in giving us a complete history. Negative answers are frequently given, only to be contradicted later on, after a successful surgical procedure has been done. The character and duration of symptoms are often too varied to make a positive diagnosis, while the x-ray and laboratory findings are as a rule only suggestive. The clinical manifestations must be our guide whether these are, or are not, supported by the laboratory, the x-ray, or even the history itself.

A definite surgical abdomen calls for immediate interference, which must be undertaken unless the patient is moribund; otherwise a period of observation, with a most careful analysis, should be advised.

Doctor Lobingier, in his discussion, says, that if the surgeon knows his case is simply acute cholecystitis, he agrees with the author, that we may wait; in other words, were it possible to visualize the pathology in every case of acute cholecystitis, its diagnosis and treatment would at once become classic.

In Doctor Mentzer's series he mentions eight cases of gangrenous gall bladder in patients who vigorously denied ever having any stomach trouble or other symptoms suggestive of biliary disease. The majority, however, had gastro-intestinal distress for many years, and most of these had the characteristic signs and symptoms of cholelithic disease for long periods. The doctor is certainly to be congratulated on his ability to correctly diagnose thirty-two of the thirty-eight cases he mentions. A case demanding immediate operation is usually regarded as a surgical abdomen, and the word "exploratory" modifies in a measure the feeling of responsibility that rests upon the surgeon at such a time.

I was recently called by Doctor Churchill to San Diego, in the night, to the bedside of my own brother who had very suddenly developed an acute abdomen. He was a very sick man. A terrific pain had struck him in the upper abdomen that evening. Except for an attack of angina three or four years before, he had not the slightest indication of impaired health. At the time, we found him with abdomen distended, muscles rigid, pulse quickened, temperature elevated, and with a leukocytosis of 36,600. What was to be done? Plain enough. Exploratory. What did we find? A phlegmonous gall bladder surrounded by a plastic exudate, bathed in a creamy pus. He is here this afternoon, is seventy-six years old, and will stand up for your inspection.

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HAROLD BRUNN, M. D. (384 Post Street, San Francisco).—Doctor Mentzer has done for us a great service in collecting this group of cases and in gathering together the literature on this subject. It is necessary that we from time to time look back upon our difficulties and evaluate our results.

As I have seen this disease, it appears to me that there are two distinct types of cases which lead to gangrene of the gall bladder.

The one type is due to a sudden blockage of the arterial supply and may come on during the course of even a mild gall bladder attack.

The other type is the result of a virulent inflammation of the gall bladder walls which causes gangrene and necrosis as a result of blocking of many capillaries, but is not in the same sense a thrombosis of the main stem.

In this latter case I feel that mistakes are not so likely to be made as the symptoms are fulminant, the patient is very ill, the acuteness of the disease does not brook delay, and the surgeon is forced to operate

on account of the severity of the symptoms. In the other type of case the indications are not so evident. The easy onset and perhaps the sharp pain which comes on at the time of blocking of the artery may pass off into a period of apparent quiescence, because sudden gangrene of the gall bladder, as in certain cases of gangrene of the appendix, may for a period of time give very few symptoms, and the laboratory findings are also not at all in line with the picture that one sees upon operation. It is in this type of case that mistakes can easily be made.

The policy of delay which most surgeons adopt in caring for cases of acute cholecystitis carries with it a very considerable danger, and one should always be on guard in recommending such delay, having in mind the possibilities of a gangrene due to a thrombosis of an artery.

As to treatment, we believe that, other things being equal, it is preferable to remove the gall bladder, but we have no hesitancy at any time in individual cases, because of the serious condition of the patient or the technical difficulty of the operation, and especially in the face of a streptococcal infection, to avoid a major procedure and be satisfied with a cholecystotomy.

There are many interesting points in the summary which Doctor Mentzer has drawn up which are well worthy of study. I believe he has stated very tersely the principles on which our judgment is based at the present time.

INDIRECT TREATMENT OF A PRESUMABLY SYPHILITIC CHILD BY MATERNAL THERAPY DURING LACTATION*

REPORT OF CASE

By H. SUTHERLAND CAMPBELL, M. D.

AND

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DISCUSSION by Harry E. Alderson, M. D., San Francisco; Ernest Dwight Chipman, M. D., San Francisco; H. J. Templeton, M. D., Oakland.

ON February 3, 1927, a woman, age forty, presented herself at the Santa Rita Clinic, stating she was pregnant, approximately the eighth month, and that she was "frightened for the child because the two other children got sick after they were born, and there was something wrong with their teeth." The clinic records showed that this woman had been given a short and spasmodic course of antiluetic treatment eighteen months previously. It was later learned that she would not attend regularly, and that her children had also been under treatment for congenital lues.

REPORT OF CASE

Maternal History.—Married at nineteen years in Bucharest. Six weeks later developed primary lesion. Was treated at the hospital "by needle, in the buttocks, for thirty days." Sore healed. She stated this form of treatment was the regular system in vogue in Bucharest at that time. Returned home, and soon became pregnant. An abortion followed at the fifth month. Some time later again became pregnant. Child was stillborn at the seventh month. The husband was informed that he had syphilis, but refused treatment. He died after having been married two years, of (?) paralysis. Approximately two years after the thirty-day treatment in the hospital, she took six weeks of mercury rubs at home once a year for five

* Read before the Dermatology and Syphilology Section of the California Medical Association at the fifty-eighth annual session, at Coronado, May 6-9, 1929.

years. She remarried seventeen years ago and had no further treatment. She became pregnant and was delivered of a baby girl at full term who seemed healthy until three weeks old, when she had "a rash on the buttocks and colds in the head." Was given some salve to apply (not a rub) and it gradually cleared up. Nothing further was noted until at about one year of age the teeth began to get black and early rotted away. No new teeth appeared until child was seven and one-half years old. These were small and did not grow. Child was apparently well until three years ago, when her blood was examined and gave a four-plus reaction. Two abortions followed this child, both at the third month. Then she was delivered of a full-term child, seven years after birth of first child. This baby, from the description, was hydrocephalic and lived only twenty-four hours.

Two years later a full-term male child was born, approximately nine years after birth of first living child. This baby was perfectly well at birth, but at six weeks developed a cold in the head and an eruption on palms and soles of feet, which was not diagnosed for some four months, when treatment was instituted. The child's Wassermann was four plus at this time. The mother and child then began treatment which was kept up in irregular fashion for some six months. From October 1923 to May 1924 the mother had a total of eleven neosalvarsans. Following this she had no treatment. Her blood Wassermann August 20, 1925, was plus-minus. On February 3, 1927, her Wassermann was plus-minus.

It was decided that we would administer intramuscular therapy rather than intravenous at this stage—the eighth month of pregnancy. We therefore gave her three intramuscular injections of salicylate of mercury, grains one, at weekly intervals. About four weeks later patient returned with an apparently healthy child, which had been born on March 4, 1927.

At this time, in the face of no slight degree of criticism, we commenced the indirect intravenous therapy, using neoarsphenamin alone, as we lean favorably toward the conclusions of Schamberg,¹ namely, that there is relatively much less danger of toxic manifestation when one uses arsphenamin alone than when one combines it with the use of mercury.

The mother was given 0.15 gram of neoarsphenamin, increasing to 0.6 the fourth week, and thereafter the regular weekly treatments of 0.6 neoarsphenamin were given for nine months. Following this, weekly treatments of intramuscular sulpharsphenamin were given for five months. During this time she experienced no distress and felt quite well. She was fortunately able to nurse the baby during the entire time. Weaning was done gradually, supplementing her regular meals with the breast feeding until she was about fourteen months old. During this entire time it will be noted the mother was receiving medication. The child's serologic reaction at periodic intervals has remained negative. The mother's Wassermann has remained plus-minus throughout.

Synopsis of Pregnancies and Therapy.—A synopsis presents the following facts:

Mother acquired syphilis at nineteen years of age. Thirty-day intramuscular therapy.

First pregnancy: abortion fifth month.

Second pregnancy: stillborn seventh month.

First husband died.

Six weeks' mercury rubs once a year for five years.

Third pregnancy (by second husband). Full-term living child, syphilitic.

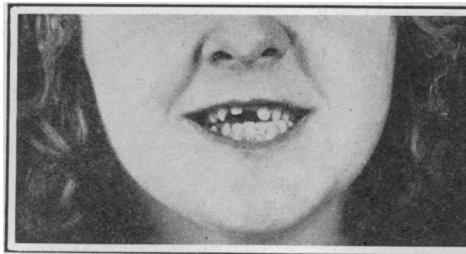


Fig. 1.—First living child. Female. Age, sixteen years. Wassermann, four plus.

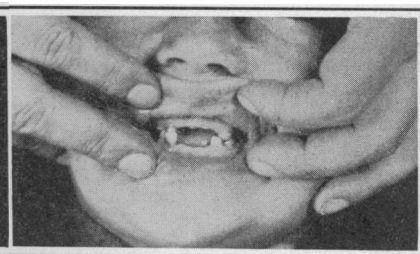


Fig. 2.—Second living child. Male. Age, seven years. Wassermann, four plus.

Fourth pregnancy: abortion third month.

Fifth pregnancy: abortion third month.

Sixth pregnancy: full-term male child, syphilitic, living.

Seventh pregnancy: full-term living male child; hydrocephalic. Lived twenty-four hours.

Eleven neoarsphenamins over period of eight months, then no treatment until February 3, 1927.

Eighth pregnancy: full-term living female child, nonsyphilitic.

Report on Condition of Child at Two Years of Age.—The following is the report by Dr. M. J. Scholl on the child at two years of age:

Birth History and Development.—Approximately ten days premature. Cephalic presentation with easy, normal labor. Baby cried instantly after birth. Entire left side of the body was "blue and cold" for two weeks. The mother had bronchitis at the time of delivery and the baby contracted an upper respiratory infection from her which lasted three days. Birth weight, eight pounds. At six months, eighteen pounds. At one year, twenty-one pounds. No history of snuffles, skin rash, fissures, or condylomata. Dentition began at eleven months. Lateral incisors were cut at thirteen months. First molars at twenty months. She sat up alone at eight months, walked at ten months, talked at eighteen months.

Feeding.—Breast-fed exclusively for approximately nine months. After this had various additions to diet until she is now on a general diet.

Diseases.—Has never been ill.

Habits.—Appetite has always been good. No constipation or diarrhea. Sleeps quietly. No urinary symptoms. Good-natured, placid disposition.

Physical Examination.—Height, 34 inches. Weight (stripped), 26¼ pounds. Normal weight, 27 pounds. Temperature (rectal), 99. Pulse, 92. The patient is a well developed, well nourished female child of healthy appearance, and bright mentally. Posture is excellent. The skin is soft, smooth and free from rash. There is no evidence of rhagades. The mucous membranes of nose and mouth are pink and healthy. Eyebrows are thick. Eyes: Pupils are equal and react to light and accommodation. No scars are present. Nose: Contour normal. There is a slight serous nasal discharge present in the anterior nares (child contracted cold one week ago). Mouth: Twelve teeth are present; normal shape and intact enamel. No caries. Tonsils: Grade 2 (on basis of grades 1 to 4), cryptic and slightly injected. A small amount of mucus is present on the posterior pharyngeal wall. Ears: A small amount of cerumen is present in the canals. The drums are white and glistening. The light reflex is present. Glands: The lymphatic glands in the anterior cervical triangles are the size of small peas, and firm. Other cervical glands are not palpable. The axillary, inguinal, epitrochlears, are not palpable. Chest: Contour normal. No Harrison's grooves or rachitic rosary felt. Lungs: Equal expansion on both sides with normal tactile fremitus. Percussion note is resonant throughout. Breath sounds are clear. No adventitious sounds. Heart: Borders are within normal limits. No thrills. Valve sounds are clear and of good quality. Rhythm is normal. Abdomen: Soft

and not protuberant. No tenderness is elicited. Liver and spleen are not palpable. No masses can be felt. Genitalia: Externally no inflammation or discharge is seen. No genital malformations. Anal orifice is smooth. The sphincter is normal. No growths or scars are present. Extremities: There are no skeletal deformities. The joints function properly. The nails are present, smooth and of normal contour. The spine is negative. Reflexes: All reflexes are present. Babin-ski is negative.

Impression.—A child of normal physical and mental development for her age—two years—with no evidence of congenital syphilis.

COMMENT

An attempt to recapitulate the various considerations for the justification of our method of procedure, which to some of our colleagues has seemed somewhat lacking in foundation, is beyond the scope of this paper. It is therefore our purpose, insofar as we are able, to confine ourselves to the most salient facts concerned, and to attempt to consider fairly and in as concise a measure as possible, the conflicting opinions of others.

Primarily, we are confronted with a woman in the eighth month of pregnancy. Her history and the physical stigmata of her only living children all prove her to be syphilitic, and while we are aware that both the mendelian and the mosaic theories are far from being applicable in the case of syphilis, we have nevertheless some small degree of reason to believe that the child will not escape the disease. As the mother has been afflicted for a lengthy period of time, it may be in order to recall the opinion of Kassowitz,³ who stated that "the virus of syphilis gradually becomes attenuated." Many other observers of great clinical experience express themselves as dissatisfied with these conclusions (Gammeltoft,² Buschke,⁴ Rasche,⁵ Nobel⁶). Gammeltoft,² in a recent article, cites two cases in a series, one born ten years and the other twenty years following infection. Both of these mothers were treated intensively with salvarsan and mercury in the first years following infection, but had had no recent therapy. Assuming, therefore, that this child is a potential syphilitic, what justification have we in not treating both the mother and the child directly as we were advised, and as has been done in most instances in the past?

Concerning this situation, we find that various authorities have widely different opinions. There

are some who advocate that every child of syphilitic parents should receive direct treatment, even though they do not present any evidence whatsoever of syphilis. Others advise treatment only in the case of children born of mothers with recent syphilis, though they show no signs of the disease. Others again, and among them Gammeltoft,² Ahmann,⁷ and Almkvist,⁸ who believe that suspected children should not be treated before they show clinical signs of the disease or manifest a positive Wassermann; but that they should be constantly under observation. In Gammeltoft's² series of ninety-eight cases treated by salvarsan during pregnancy, only nineteen of the children showed evidence of lues, seventy-nine being apparently healthy, and remaining so.

Almkvist⁸ states: "It has always been considered unscientific procedure in cases of acquired syphilis to start treatment before definite symptoms establish the diagnosis, and I cannot see that this procedure is less scientific simply because it involves little children instead of adults."

The results of intensive and direct therapy on the congenital syphilitics in our hands has left much to be desired. In some instances, in the reluctance of serological change; in others, in the recurrence of evidence of activity following rest periods. These findings are upheld by clinicians of much greater experience. Leonard Findlay,⁹ whose opinion is both valuable and conservative, states: "The treatment of congenital syphilis is, if not a failure, at least a great disappointment." The consensus of opinion appears to bear out Findlay's conclusions.

TOXICOLOGIC ACTION OF CERTAIN DRUGS

We shall now consider a phase of the situation which has received but scant consideration, *i. e.*, the toxicologic action of the metals employed. For some time previous to the experiments of Kolmer and Lucke,¹⁰ it had always been a debatable question at postmortems as to whether the disease or the metal was responsible for the parenchymatous degeneration found in essential organs. These men demonstrated that arsenic and mercury, even in small doses, produced degenerative changes in the organs of normal animals. Schamberg,¹¹ in a consideration of the above experiments, states: "Both arsenic and mercury administered in therapeutic doses bring about structural alterations in organs, arsenicals affecting the liver, suprarenals and blood vessels, mercury having an affinity for kidneys and brain. Syphilitic treatment requires repeated use of these drugs. When used with circumspection, harmful results may be avoided. When used otherwise, unfortunate results may take place. Fatalities

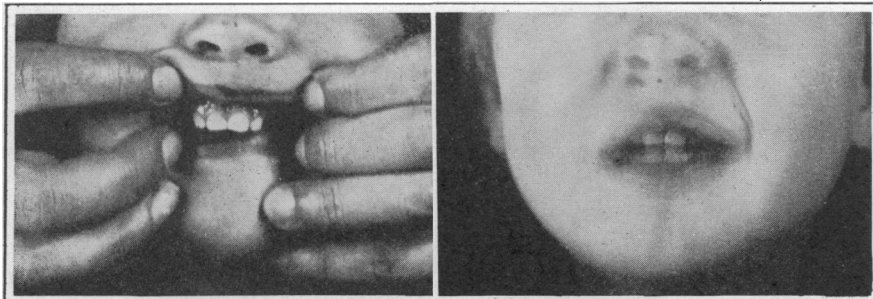


Fig. 3. Third living child. Female. Age, two years. Wassermann, negative. Milk-teeth structure only of interest in point of mother's statement that both previous children had delayed dentition with early necrosis and loss of teeth.

Fig. 4.—Same as Fig. 3.

have occurred after both arsenic and mercury. Many scores, if not hundreds, of deaths after mercury have been reported."

In this connection Brown¹² states: "The determination of toxicity of new compounds for experimental animals, insofar as duration of life is concerned, is insufficient, and the question of tissue injury has not attracted the attention that the subject deserves."

The degree of repair of the degenerative changes in these essential organs is fortunately sufficient in most cases to make the structural changes negligible in point of interference of perfect functioning, but we should not lose sight of the fact that any added strain upon those organs, which would undoubtedly ensue during a possible later intercurrent infection, would be attended by an element of grave danger. One is, we think, justified in wondering whether this early tissue damage might not be one of the factors which tend to produce the mortality percentage among the treated congenital syphilitics.

While some maintain, and we believe it reasonable to suppose, that a syphilitic would offer a greater degree of resistance to the metals than would a normal individual, we think we are justified in assuming early tissue damage in essential organs in the treated syphilitic child, the degree of damage being fairly proportionate to the dosage. We feel, in face of this evidence, that the method of body weight determination of dosage of the metals, while being well tolerated in an adult, is too crude in the case of a very young child.

In view of these opinions, we have felt that a Wassermann-fast reaction in a child following adequate therapy is scarcely sufficient justification for the continuous and sometimes intermittent long-drawn-out therapy which often obtains as a matter of routine.

It is well known that most drugs having a destructive effect upon a parasite exert a similar action, but in much lesser degree, upon the host. Therein lies the justification for their use, but if the pharmacologic action of a drug has been demonstrated to have very little effect upon the parasite over a measurably adequate period of time, and we feel that the toxicologic action is being continued, it seems illogical to prolong its use. The inclination on the part of some clinicians, in the face of no response is, unfortunately, not to stop therapy, but rather to increase it.

REASONS FOR INDIRECT THERAPY

This child after birth manifested no clinical evidence of lues, and this was supported by a negative Wassermann. We hesitated to assume the responsibility of not giving a possibly latent syphilitic treatment, though many able men advise that course of procedure. Conversely, we were just as reluctant about giving direct therapy, primarily because of our convictions regarding early tissue damage, and, secondly, because we would by so doing classify this infant for the rest of her life as a syphilitic. We therefore determined to treat the child indirectly, by administering arsenic intravenously to the mother during the

entire period of lactation, not only for the therapeutic effect of the arsenic, but also in the hope that some passive immune body formation might be supplied to the child, for it must be admitted that immune body formation, if it exists, must be highly developed in this mother.

The consensus of opinion seems to favor a direct spirocheticidal action on the part of the arsphenamin, and it denies the immune body formation theory. However, it would be well to remember that nothing is definitely known regarding the action of the arsphenamin in the body. Briefly considered, Voegtlin's¹³ theory is that the arsenic linkage is broken, and arsenoxid is formed. This toxic substance finds a physiologic antidote in the shape of reduced glutathione, a substance found in muscle tissue and liver. Arsenoxid combines with this substance, and is held back by the body tissues. Whether the arsenic is further oxidized to the pentavalent organic arsenicals is unknown, but it is presumed so, as all pentavalent organic arsenicals are rapidly eliminated by the kidney. The mechanism whereby arsenoxid destroys the spirochetes appears to be the same as the one responsible for the toxic effect of arsenoxid on mammalian tissue in the absence of unreduced glutathione, *i. e.*, an effect of the trivalent arsenoxid arsenic upon some sulphhydryl compound occurring in the spirochete.

Voegtlin,¹³ in a series of experiments has compiled much of interest in the matter, but rejects the theory of immune body formation on the grounds that six to eight hours is too short a period of time for their development, and arsenic injections have been shown to have spirocheticidal action within that time. The therapeutic action of the arsenicals, according to the above theory, is due to a chemical reaction—the effective lethal agent arsenoxid being prevented from harming the body tissues by (1) slowness of formation, and (2) its combination with the reduced glutathione of the tissues.

NONARSENICAL DRUGS

Before dismissing the matter and accepting this dictum as final, we must recognize that other substances differing widely in their composition, give somewhat similar results to the arsenicals in the matter of healing syphilitic lesions, *i. e.*, mercury, bismuth, iodid, and even protein injections. Though perhaps not so permanent in their effect, we have occasionally found the iodid salts given intravenously to have even more effective involuting action in the case of tertiary lesions than the arsenicals. Are we, therefore, to believe that all these various agents have a similar chemical reaction in the body?

ACTION OF THE DRUGS

It seems to be just as feasible to suppose that these agents destroy the spirochete by provoking or stimulating the body tissues to a relatively high immune body formation, as that it is due to destruction by direct chemical combination. To our minds, the time of production of immune bodies dates from the inception of the spirochete,

and the later injection of arsenic merely serves to increase them. V. H. Park,¹⁴ quoting Fisch and Stewart, states: "Seventeen apparently healthy infants failed to show any signs of syphilis, although their mothers were in the most contagious phase of florid syphilis. Immunization by way of placenta before birth, or by suckling afterward, will have to be accepted in these cases, according to the authors."

We must confess to leaning strongly toward the views of the minority and have a firm conviction that immune body formation plays an important rôle in the matter. If we correctly interpret the disease, every one of the various physical phenomena from primary chancre to tertiary lesions is merely an external and visible sign of the warfare which is being waged by the body. If one denies immune body formation, how does one account for the fact that the arsphenamins are useless in cases of malignant syphilis, or that the mother of these children has enjoyed good health all her life, and is today, as far as it is possible to determine, physically well? She has had, it is true, throughout the time she has been under observation, a plus-minus Wassermann reaction, but this we understand to be interpreted as negative, in the absence of other evidence. The only positive evidence we have that she is a syphilitic is that made manifest at every pregnancy, and in the stigmata of her two older living children. Many similar cases are known to you.

It was shown in 1838, by analysis, that the milk of women taking arsenic preparations contained arsenic. During that year Thompson, after a series of experiments on the physiologic action of iodid of arsenic on experimental animals concluded that arsenic was found in all the secretions; when administered during lactation, it furnished a convenient manner of giving it to infants at the breast through the milk of the mothers, and that when used internally for long it accumulated in the system.

One might claim that no therapeutic action follows oral administration. Schamberg¹¹ states: "The oral administration of arsphenamin was shown to be followed by absorption" and Kolmer^{10a} ranks the absorption of arsenicals administered by mouth as higher than that which follows rectal administration.

Fordyce, Rosen, and Meyer¹⁵ states: "The ingestion of milk from treated patients has raised this question in our minds, as to the possible therapeutic value of arsenic so received, and also its possible detrimental effect in producing a tolerance to arsenic on the part of the nursing child."

Noguchi and Klauder¹⁶ demonstrated a developing resistance to arsenic in both strains of pallida by administering very small doses of arsenic to rabbits, transferring the strain to other rabbits and gradually increasing, until a 68 per cent resistance to arsenic was obtained.

It would appear that we are justified in believing that direct therapy to the child, judging by the results obtained clinically, is ineffective in coping with a spirochete which has in most instances already been subjected to the action of

a comparatively higher dose of the metal while in a former host (maternal) and in all probability in a less resistant state.

And presuming that this increased spirochetal resistance obtained in this child, the difference in dosage, direct or indirect, would make but little difference to the end result unless, as we believe, passive immune body formation was also being supplied. In that case, if our conviction be correct, indirect therapy would probably prove the more efficacious. We do not presume to prove anything by this paper, as we start with an unknown premise. We have no means of knowing whether this child would have developed syphilis. We have known many cases of normal children born of syphilitic mothers that have remained so, but we think sufficient justification for its presentation lies in the fact that it offers a method of treatment for those who very rightly hesitate to subject an apparently normal child to direct anti-syphilitic medication, and yet are loath to refuse treatment in the face of the possibility of positive signs of syphilitic activity developing at a later date.

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DISCUSSION

HARRY E. ALDERSON, M.D. (490 Post Street, San Francisco).—We have been able many times to observe the benefit derived by the nursing syphilitic infant whose mother was given neoarsphenamin, and feel that it is a valuable method. Certainly, in this case reported by Campbell and Frost, no harm was done, and even though it is possible that the child might have remained well without the treatment, it was the duty of the physicians to make every effort to prevent future trouble. Delayed manifestations of congenital syphilis are only too common. At the Stanford skin and syphilis clinic we frequently treat pregnant syphilitics and we always administer neoarsphenamin and bismuth, continuing the same during the nursing period.

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ERNEST DWIGHT CHIPMAN, M.D. (350 Post Street, San Francisco).—This paper deals with a problem that is rich in both medical and human interest. The authors set up no claim that their solution is the only one or the correct one.

A syphilitic mother may, of course, begin with miscarriage at the first or second month, pass through progressively longer terms of pregnancy until full term syphilitic offspring issue. Finally, if persistent enough, she may bring forth full-term progeny free from clinical stigmata and serologically negative. It is such a case as this last that is under discussion.

There are three possible ways of meeting the situation, viz.: first, with direct, active treatment; second, with no treatment at all; third, with a compromise by indirect treatment through the maternal milk. In making a decision, the question largely resolves itself into this: Are we justified in the administration of toxic and potentially harmful substances into the circulation of any subject, adult or infant, on the mere presumption that he is syphilitic? My own view is that treatment should never be undertaken in the absence of both clinical and serologic indications, subject of course to the reservation, in the case of infants, that one is in duty bound to follow the case as closely as possible lest late, hereditary stigmata develop.

In this particular case, even though in the title the authors use the term "a presumably syphilitic child," I do not feel sure that the presumption of syphilis is justified. A subject is or is not syphilitic, and in the absence of both clinical and serologic evidence it does not seem to me that we are warranted in saddling a diagnosis of syphilis upon one even though his mother and "his sisters and his cousins and his aunts" are infected.

With respect to treatment the authors decided upon a middle course and whether the child would, or will, ever develop definite stigmata or positive blood reaction, we shall perhaps never know. It is noteworthy, however, that the physical findings at the end of two years revealed nothing which could be attributed to adverse result of treatment.

It would be interesting if in the treatment of frankly syphilitic infants the results of direct and indirect therapy might be compared not only with respect to serologic and clinical response, but to the general physical condition after two years or more of treatment.

The authors are deserving of praise for a paper rich in thought and philosophical flavor that should prove a stimulus to every one of us.

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H. J. TEMPLETON, M. D. (3115 Webster Street, Oakland).—The authors of this paper have given us considerable food for thought and at the same time have reopened the discussion of an old problem, viz., in regard to the desirability of treating an apparently normal child of a syphilitic mother. This question has been debated in dermatologic circles for many years, but we are still only able to say, as did Omar Khayyam, "and heard great argument, but evermore came out by the same door wherein I went."

The conservative school believes that, just as we never treat an adult for syphilis until a positive diagnosis has been made, we should never treat the child of a syphilitic mother until we can definitely prove that it has the disease. The authors followed this conservative course and their judgment would seem to have been vindicated by the excellent result which they obtained, the child being clinically and serologically well at the age of two years. And yet, one may be permitted to speculate as to what will happen to this child in future years. Stokes has said, "Infants who appear well and perhaps respond negatively to the earlier Wassermann tests may, in later life, under the influence of trauma, lowered resistance, and the onset of puberty, develop active and unmistakable signs of the disease."

It is my belief that no definite rule can be laid down for the treatment or withholding of treatment of the normal baby of a syphilitic mother. Each case must be determined on its individual merits. Thus, if the child has been born many years after the date

of the mother's infection, if her Wassermann is only weakly positive and she presents no clinical evidence of syphilis, and if she has given birth to other apparently normal children, one would be justified in withholding treatment. On the other hand, if the mother's infection is of a comparatively recent date, if her Wassermann is strongly positive, if she presents clinical signs of syphilis and has given birth to syphilitic children, I believe that her baby should be treated regardless of apparent clinical and serologic normality.

In the case which we are discussing, the mother's Wassermann was only weakly positive and she was apparently healthy. These two facts might influence us to withhold therapy. But when we note that every one of her seven previous pregnancies ended disastrously we must stop and ponder. I must confess that had I been confronted with this same problem, I would have regarded the baby as probably syphilitic and would have instituted prolonged treatment with bismuth and sulpharsphenamin.

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DOCTORS CAMPBELL AND FROST (Closing).—With reference to Dr. E. D. Chipman's observation:

We also feel that it would be of interest to utilize this mode of therapy on the frankly syphilitic child. Only in this manner could its value be determined, and while at the outset it would seem a very radical departure, the results of direct medication would appear to warrant it and are, without doubt, a justification for its trial.

One must realize at the outset, however, that this method has its limitations, namely, that the mother must be able to breast-feed the child; she must be able to tolerate the drug, and we would emphasize the necessity of keeping a careful and constant check on the mother during the entire time she is under therapy, stressing that she should report anything untoward that may occur, however slight it may seem. The length of time the mother has to be kept under weekly treatments constituted in our minds the greatest drawback to this mode of therapy. However, this patient tolerated the drug well for some fourteen months, and has been perfectly well ever since. This is a moot question, and to us one which time and experience alone can answer.

PEPTIC ULCER—ITS MANAGEMENT*

REPORT OF CASES

By GRANT H. LANPHERE, M. D.

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DISCUSSION by Frederick A. Speik, M. D., Los Angeles; Henry Snure, M. D., Los Angeles; Paul B. Roen, M. D., Hollywood.

THE management of peptic ulcer depends upon a careful consideration of its probable location, duration and complications.

Ulcers of the stomach and duodenum are fundamentally alike. Such differences as exist are due very largely to the complications peculiar to the stomach and duodenal location of the ulcer.

The cause of ulcers of the stomach and duodenum as they occur clinically has not been satisfactorily established. It is probable that there are many factors which predispose to their formation. Two of the more recent theories are a constitutional predisposition or an irritability of the autonomic nervous system associated with chronic oral sepsis, and foci of infection which are drained by the portal vein.

* Read before the General Medicine Section of the California Medical Association at the fifty-eighth annual session at Coronado, May 6-9, 1929.